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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,760	02/26/2001	Motoki Kato	450101-02582	6325

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NEW YORK, NY 10151

EXAMINER

VOLPER, THOMAS E

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 07/28/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,760

Applicant(s)

KATO, MOTOKI

Examiner

Thomas Volper

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US 6,275,536) in view of Pearlstein (US 5,691,986).

Regarding claims 1, 6 and 11, Chen discloses a multi-channel transcoder that separates an input MPEG transport stream into n input bitstreams, transcodes the individual bitstreams and multiplexes them back into a transport stream (col. 5, line 45 – col. 6, line 22; see also Fig. 2). Chen also discloses certain information such as a temporal reference is stored in each processor of the transcoder so that the bitstreams can be correctly ordered, multiplexed and transmitted (col. 8, lines 58-64). This meets the limitation of storing timing information concerning when each stream appears in the multiplexed stream. Chen fails to expressly disclose that the bitstreams are elementary streams, and that the first elementary stream is converted to a signal, then packetized to generate a first packet. Pearlstein discloses a device that accepts an MPEG transport stream, separates it into elementary streams, converts an elementary stream into a signal, and then packetizes the signal to be re-multiplexed (see Fig. 1). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to separate the MPEG transport stream of Chen into elementary streams. It also would have been

obvious to de-packetize, i.e. convert a stream into a signal, and then re-packetize the stream. One of ordinary skill in the art would have been motivated to separate the input transport stream into elementary streams because an MPEG transport stream is comprised of packets of elementary streams that each belong to a particular program. One of ordinary skill in the art would have been motivated to convert an elementary stream to a signal in order to adjust the data rate of that stream. The adjusted rate signal would have to be re-packetized since packets are the basic units of an MPEG transport stream.

Regarding claims 2, 7 and 12, Chen discloses encoding the individual bitstreams at predetermined rates (col. 4, lines 56-67).

Regarding claims 3, 8 and 13, Chen discloses a flexible transcoding process for the individual bitstreams that may use different coding algorithms (col. 5, lines 1-15).

Regarding claims 4, 9 and 14, as stated above, Chen discloses maintaining a temporal reference word for each bitstream in order to multiplex the bitstreams into a transport stream (col. 8, lines 58-64).

Regarding claims 5, 10 and 15, Chen discloses an MPEG-video transcoder, thus the bitstreams are video streams. As stated above, it is obvious for the bitstreams to be elementary streams of an MPEG program.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Rosengren et al. (US 6,741,617) Arrangement for Decoding Digital Video

Signals

- Hua et al. (US 6,477,706) Cable Television System Using Transcoding Method
- Assuncao (US 6,226,328) Transcoding Apparatus for Digital Video Networking
- Rosengren et al. (US 6,041,068) Method and Apparatus for Multiplexing and Transmitting Autonomously/Intra Coded Pictures Along with the Main or I, P, B Pictures/Video
- Tiernan et al. (US 6,172,988) Method for Universal Messaging and Multiplexing of Video, Audio, and Data Streams

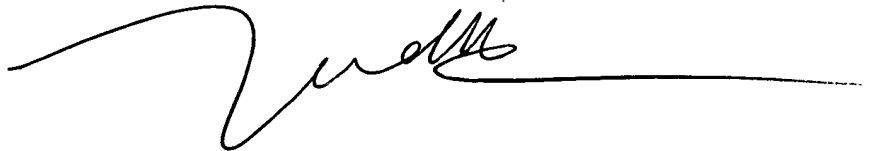
4. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is 703-305-8405 and fax number is 703-746-9467. The examiner can normally be reached between 8:30am and 6:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at 703-308-6602. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Thomas E. Volper

TEV

July 21, 2004



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600